

***LineUp With Math™* Alignment**  
**Mathematics Content Standards, Benchmarks and Performance Standards**  
**June 2002**

**Strand: NUMBER AND OPERATIONS****Standard:** Students will understand numerical concepts and mathematical operations.**5-8 Benchmark:** Compute fluently and make reasonable estimates.**Performance Standards: Grade 5**

3. Use estimation strategies to verify the reasonableness of calculated results.

***LineUp With Math™* Activities**

--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

**Strand: ALGEBRA****Standard:** Students will understand algebraic concepts and applications.**5-8 Benchmark:** Analyze changes in various contexts.**Performance Standards: Grade 5**

1. Recognize and create patterns of change from everyday life using numerical or pictorial representations.

***LineUp With Math™* Activities**

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

2. Generalize patterns of change and recognize the same general patterns presented in different representations.

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

**Strand: MEASUREMENT****Standard:** Students will understand measurement systems and applications.**5-8 Benchmark:** Understand measurable attributes of objects and the units, systems, and processes of measurement.**Performance Standards: Grade 5**

3. Solve problems involving linear measurement, weight, and capacity (e.g., measuring to the nearest sixteenth of an inch or nearest millimeter; using ounces, milliliters, or pounds and kilograms) to the appropriate degree of accuracy.

***LineUp With Math™* Activities**

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

**5-8 Benchmark: Apply appropriate techniques, tools, and formulas to determine measurements.**

<b>Performance Standards: Grade 5</b>	<b><i>LineUp With Math™</i> Activities</b>
1. Solve measurement problems using appropriate tools involving length, perimeter, weight, capacity, time, and temperature.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.  --Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.
2. Select and use strategies to estimate measurements including length, distance, capacity, and time.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.  --Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

**Strand: DATA ANALYSIS AND PROBABILITY**

**Standard:** Students will understand how to formulate questions, analyze data, and determine probabilities.

**5-8 Benchmark: Develop and evaluate inferences and predictions that are based on data.**

<b>Performance Standards: Grade 5</b>	<b><i>LineUp With Math™</i> Activities</b>
2. Compare a given prediction with the results of an investigation.	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.